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Fig. 1A

(SEQ ID NO:1-nucleotide sequence and SEQ ID NO:2-amino acid sequence)
Escherichia coli B Phytase Sequence

```
        1
        ATG AAA GCG ATC TTA ATC CCA TTT TTA TCT CTT CTG ATT CCG
TTA ACC CCG
        Met Lys Ala Ile Leu Ile Pro Phe Leu Ser Leu Leu Ile Pro
Leu Thr Pro

        CAA TCT GCA TTC GCT CAG AGT GAG CCG GAG CTG AAG CTG GAA
AGT GTG GTG
        Gln Ser Ala Phe Ala Gln Ser Glu Pro Glu Leu Lys Leu Glu
Ser Val Val

        ATT GTC AGT CGT CAT GGT GTG CGT GCT CCA ACC AAG GCC ACG
CAA CTG ATG
        Ile Val Ser Arg His Gly Val Arg Ala Pro Thr Lys Ala Thr
Gln Leu Met

        CAG GAT GTC ACC CCA GAC GCA TGG CCA ACC TGG CCG GTA AAA
CTG GGT TGG
        Gln Asp Val Thr Pro Asp Ala Trp Pro Thr Trp Pro Val Lys
Leu Gly Trp

        CTG ACA CCG CGN GGT GGT GAG CTA ATC GCC TAT CTC GGA CAT
TAC CAA CGC
        Leu Thr Pro Arg Gly Gly Glu Leu Ile Ala Tyr Leu Gly His
Tyr Gln Arg

        CAG CGT CTG GTA GCC GAC GGA TTG CTG GCG AAA AAG GGC TGC
CCG CAG TCT
        Gln Arg Leu Val Ala Asp Gly Leu Leu Ala Lys Lys Gly Cys
Pro Gln Ser

        GGT CAG GTC GCG ATT ATT GCT GAT GTC GAC GAG CGT ACC CGT
AAA ACA GGC
        Gly Gln Val Ala Ile Ile Ala Asp Val Asp Glu Arg Thr Arg
Lys Thr Gly

        GAA GCC TTC GCC GCC GGG CTG GCA CCT GAC TGT GCA ATA ACC
GTA CAT ACC
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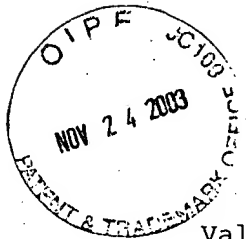
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Fig. 1B

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        Glu Ala Phe Ala Ala Gly Leu Ala Pro Asp Cys Ala Ile Thr
Val His Thr

        CAG GCA GAT ACG TCC AGT CCC GAT CCG TTA TTT AAT CCT CTA
AAA ACT GGC
        Gln Ala Asp Thr Ser Ser Pro Asp Pro Leu Phe Asn Pro Leu
Lys Thr Gly

        GTT TGC CAA CTG GAT AAC GCG AAC GTG ACT GAC GCG ATC CTC
AGC AGG GCA
        Val Cys Gln Leu Asp Asn Ala Asn Val Thr Asp Ala Ile Leu
Ser Arg Ala

        GGA GGG TCA ATT GCT GAC TTT ACC GGG CAT CGG CAA ACG GCG
TTT CGC GAA
        Gly Gly Ser Ile Ala Asp Phe Thr Gly His Arg Gln Thr Ala
Phe Arg Glu

        CTG GAA CGG GTG CTT AAT TTT CCG CAA TCA AAC TTG TGC CTT
AAA CGT GAG
        Leu Glu Arg Val Leu Asn Phe Pro Gln Ser Asn Leu Cys Leu
Lys Arg Glu

        AAA CAG GAC GAA AGC TGT TCA TTA ACG CAG GCA TTA CCA TCG
GAA CTC AAG
        Lys Gln Asp Glu Ser Cys Ser Leu Thr Gln Ala Leu Pro Ser
Glu Leu Lys

        GTG AGC GCC GAC AAT GTC TCA TTA ACC GGT GCG GTA AGC CTC
GCA TCA ATG
        Val Ser Ala Asp Asn Val Ser Leu Thr Gly Ala Val Ser Leu
Ala Ser Met

        CTG ACG GAG ATA TTT CTC CTG CAA CAA GCA CAG GGA ATG CCG
GAG CCG GGG
        Leu Thr Glu Ile Phe Leu Leu Gln Gln Ala Gln Gly Met Pro
Glu Pro Gly

        TGG GGA AGG ATC ACC GAT TCA CAC CAG TGG AAC ACC TTG CTA
AGT TTG CAT
        Trp Gly Arg Ile Thr Asp Ser His Gln Trp Asn Thr Leu Leu
Ser Leu His

        AAC GCG CAA TTT TAT TTG CTA CAA CGC ACG CCA GAG GTT GCC
CGC AGC CGC
        Asn Ala Gln Phe Tyr Leu Leu Gln Arg Thr Pro Glu Val Ala
Arg Ser Arg
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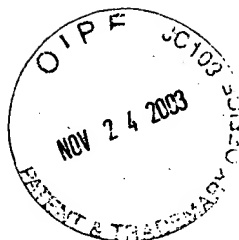
Fig. 1C

```
          GCC ACC CCG TTA TTG GAT TTG ATC ATG GCA GCG TTG ACG CCC
CAT CCA CCG
          Ala Thr Pro Leu Leu Asp Leu Ile Met Ala Ala Leu Thr Pro
His Pro Pro

          CAA AAA CAG GCG TAT GGT GTG ACA TTA CCC ACT TCA GTA CTG
TTT ATT GCC
          Gln Lys Gln Ala Tyr Gly Val Thr Leu Pro Thr Ser Val Leu
Phe Ile Ala

          GGA CAC GAT ACT AAT CTG GCA AAT CTC GGC GGC GCA CTG GAG
CTC AAC TGG
          Gly His Asp Thr Asn Leu Ala Asn Leu Gly Gly Ala Leu Glu
Leu Asn Trp

          ACG CTT CCC GGT CAG CCG GAT AAC ACG CCG CCA GGT GGT GAA
CTG GTG TTT
          Thr Leu Pro Gly Gln Pro Asp Asn Thr Pro Pro Gly Gly Glu
Leu Val Phe

          GAA CGC TGG CGT CGG CTA AGC GAT AAC AGC CAG TGG ATT CAG
GTT TCG CTG
          Glu Arg Trp Arg Arg Leu Ser Asp Asn Ser Gln Trp Ile Gln
Val Ser Leu

          GTC TTC CAG ACT TTA CAG CAG ATG CGT GAT AAA ACG CCG CTG
TCA TTA AAT
          Val Phe Gln Thr Leu Gln Gln Met Arg Asp Lys Thr Pro Leu
Ser Leu Asn

          ACG CCG CCC GGA GAG GTG AAA CTG ACC CTG GCA GGA TGT GAA
GAG CGA AAT
          Thr Pro Pro Gly Glu Val Lys Leu Thr Leu Ala Gly Cys Glu
Glu Arg Asn

          GCG CAG GGC ATG TGT TCG TTG GCA GGT TTT ACG CAA ATC GTG
AAT GAA GCA
          Ala Gln Gly Met Cys Ser Leu Ala Gly Phe Thr Gln Ile Val
Asn Glu Ala

          CGC ATA CCG GCG TGC AGT TTG AGA TCT CAT CAC CAT CAC CAT
CAC TAA    1323
          Arg Ile Pro Ala Cys Ser Leu Arg Ser His His His His His
His End
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